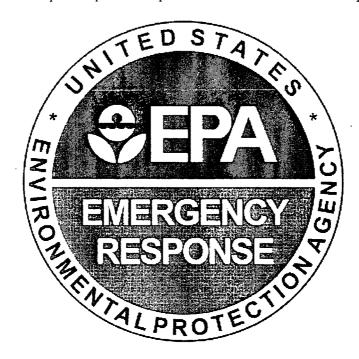
U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

St. Joseph Hospital Phosphine Release - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region V

Subject:

POLREP #2

Final Pollution Report

St. Joseph Hospital Phosphine Release

Ypsilanti, MI

Latitude: 42.2647020 Longitude: -83.6568760

To:

Bruce VanOtteren, MDEQ Mike Chezik, U.S. DOI David Chung, U.S. EPA Jason El-Zein, U.S. EPA Linda Nachowicz, U.S. EPA Jeff Kelley, U.S. EPA Region 5 Mark Durno, U.S. EPA Region V

Duty Office, USCG Joe Walczak, MDEQ Joe Malek, U.S. EPA

From:

Lori Muller, On-Scene Coordinator

Date:

9/4/2011



Reporting Period: 4/26/2011 to 5/5/2011

1. Introduction

3

1.1 Background

Site Number: Contract Number:

D.O. Number: Action Memo Date:

Response Authority: CERCLA **Response Type:** Emergency

Response Lead: EPA Incident Category: Removal Action

NPL Status: Non NPL Operable Unit:

 Mobilization Date:
 4/25/2011
 Start Date:
 4/25/2011

 Demob Date:
 5/5/2011
 Completion Date:
 5/5/2011

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

At approximately 1000 hours, on April 25, 2011, a private citizen attempted suicide by ingesting "poison peanuts" that contained zinc phosphide. The chemical reaction between the zinc phosphide and the individual's body resulted in the release of phosphine gas.

The individual was transported to St. Joseph Mercy Hospital, in Ypsilanti, Michigan, and was placed in a room in the hospital's Intensive Care unit. Due to the individual giving off phosphine gas, the doctors and nurses at the hospital were initially exposed to the gas, and, as a result, showed signs of exposure (e.g., difficulty breathing, nausea, etc.).

The hospital staff moved the individual to a second room in the hospital's Intensive Care unit which was placed under negative pressure. This action minimized the exposure to hospital personnel beyond those doctors and nurses who were directly caring for the individual.

Mr. Pierre Gonyon, St. Joseph's contact for facility safety, contacted the hospital's cleanup contractor, Arch Environmental Group, Inc. (Arch Environmental), of Farmington Hills, Michigan, and the Washtenaw County Hazardous Materials Response Authority (WCHMRA).

The workers from Arch Environmental worked to decontaminate surfaces and containerize the equipment and other materials in the first Intensive Care unit that came into direct contact with the individual.

WCHMRA used a Dräger Chip-Measurement System gas monitor to measure the

concentration of phosphine gas in the breathing zone of the patients room. These measurements indicated a concentration of phosphine gas between 0.1 and 0.3 ppm.

After depleting its inventory of phosphine chips, WCHMRA contacted the U.S. EPA, at 1627 hours, in order to obtain additional technical assistance and air monitoring equipment capable of monitoring for phosphine gas.

1.1.2.1 Location

St Joseph Hospital 5301 McAuley Dr. Ypsilanti, MI 48197

1.1.2.2 Description of Threat

See section 1.1.2.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

N/A

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

A summary of the evolving events was obtained from ATSDR as coordination efforts continue in the days following the initial response:

" Earlier today (4-27) the patient came out of his induced coma, pulled out the tubing from his endotracheal tube and became agitated. The phosphine readings became elevated, particularly as the hospital staff moved the PID monitor near his fecal matter, urine, and fluids from his trach tube. This set off the alarm on the PID, resulting in another HazMat response to the hospital with SCBAs. It was determined that the interaction of the sensor on the PID with the phosphine gas left a coating on the sensor that may have resulted in a falsely high reading. As of 5:00 PM ET on Wed. (4-27), the hospital has hired an Industrial Hygienist to coordinate air equipment and doc

Or e monitor because it was no lon

monitoring activities in the hospital, including maintenance and calibration of the documentation of the readings. "							
On Monday, May 5, 2011, START returned to the hospital to retrieve the ToxiRa longer needed by the hospital staff.							

2.1.2	Resi	ponse	Actions	to	Date
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See section 2.1.1.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

N/A

2.1.4 Progress Metrics

N/A

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

N/A

- 2.2.1 Anticipated Activities
- 2.2.1.1 Planned Response Activities
- **2.2.1.2 Next Steps**
- **2.2.2 Issues**
- 2.3 Logistics Section

N/A

- 2.4 Finance Section
 - 2.4.1 Narrative

2.5 Safety Officer

Lori Muller, U.S. EPA OSC

2.6 Liaison Officer

N/A

2.7 Information Officer

N/A

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

3. Participating Entities

3.1 Unified Command

N/A

3.2 Cooperating and Assisting Agencies

U.S. Environmental Protection Agency
U.S. EPA Technical Contractor (Dynamac Corporation)
Washtenaw County Hazardous Materials Response Authority
Arch Environmental Group, Inc.
St. Joseph Mercy Hospital
Agency for Toxic Substances and Disease Registry
American College of Medical Toxicologists
Disaster Mortuary Operational Response Team (DMORT)

4. Personnel On Site

U.S. Environmental Protection Agency: FOSC Lori Muller Washtenaw County Hazardous Materials Response Authority: Victor Chevrette Arch Environmental Group, LLC: Michael Daul U.S. EPA Technical Contractor (Dynamac Corporation): Michael Browning St. Joseph Mercy Hospital: Pierre Gonyon

5. Definition of Terms

N/A

6. Additional sources of information

6.1 Internet location of additional information/reports

N/A

6.2 Reporting Schedule

7. Situational Reference Materials

N/A